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ABSTRACT

The central concern of this paper is to illustrate how certain dimensions of jobs are helpful in determining whether individuals have comparable positions in the work setting. First, the notion of power in the work setting and its relevance to stratification research are discussed. How this conceptualization helps in the understanding of sex differences in job positions is then sketched. Finally, the usefulness of these concepts in clarifying the similarities and differences of positions of men and women in the work setting are demonstrated empirically. The two aspects of power on the job considered are authority and autonomy. The empirical analysis tests whether men and women have differing amounts of authority and autonomy holding constant other relevant variables. These variables include occupational status, education, and self employment. The analysis indicates that sex has a main effect on occupational status level, holding constant the main effects of other variables. It was demonstrated that women are less likely to be in supervisory positions than men. (Author/AM)

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SEXUAL STRATIFICATION: DIFFERENCES IN POWER IN THE WORK SETTING

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SEXUAL STRATIFICATION: DIFFERENCES IN POWER IN THE WORK SETTING

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ABSTRACT

The central concern of this paper is to illustrate how certain dimensions of jobs are helpful in determining whether individuals have comparable positions in the work setting. We consider the usefulness of including certain aspects of power in the work setting into studies of stratification. The two aspects of power in the work setting considered here are authority, control over the work process of others, and autonomy, control over one's own work process. We sketch out how this conceptualization helps one better understand sex differences in job positions. We demonstrate empirically that there is sexual inequality in power in the work setting holding constant other relevant variables.

Sexual Stratification: Differences in Power in the Work Setting

The central concern of this paper is to illustrate how certain dimensions of jobs are helpful in determining whether individuals have comparable positions in the work setting. To do this, one must consider several characteristics upon which jobs are differentiated. While there are a number of dimensions that could be considered, we are concerned with the usefulness of certain aspects of power on the job in locating individuals in the job hierarchy. By job hierarchy, we mean a structure which is differentiated by several dimensions of jobs. Some possible dimensions are occupational status, power on the job, and earnings. We are reluctant to utilize the more conventional term occupational structure because power in the work setting is not a characteristic of an occupation (as it varies tremendously across incumbents of an occupation) but is a characteristic of a job. In this paper, we discuss our notion of power in the work setting and its relevance to stratification research. Then, we attempt to sketch out how this conceptualization helps us understand sex differences in job positions. Finally, we demonstrate empirically the usefulness of these concepts in clarifying the similarities and differences of positions of men and women in the work setting.

The two aspects of power on the job to be considered here are authority and autonomy. We define authority as control over the work process of others and autonomy as control over one's own work process. In the past one hundred years, the structure of work has become more differentiated with the advent of new technologies and more complex organizations. This development necessitated a

differentiation of authority structures (Bendix, 1956; Galbraith, 1969; Dahrendorf, 1959; Chandler, 1962). Concomitantly, the amount of freedom one has in the work setting (autonomy) has decreased for that segment of the labor force for whom routinization of tasks has increased (Braverman, 1974). On the other hand, workers whose jobs required increasingly specialized skills have obtained more autonomy. As the structure of organizations has changed, authority relations and autonomy have become more complex; these complexities have implications for all aspects of social behavior. This aspect of social differentiation should be studied by students of stratification.

We argue that individuals with differing amounts of power in the work setting would be expected to be in different positions in the job hierarchy as well as in the society external to the work setting. Indeed, researchers in stratification have been studying the consequences of one's position in the authority structure (Wright and Perrone, 1977; Kluegel, 1975; Spaeth, 1976). Wright and Perrone (1977) show that one's position of authority affects the process by which (s)he attains income while Kluegel (1975) ascertains the consequences of one's authority on the job for actions outside of the work setting (voting behavior, social participation and values concerning social issues). These pieces of research show that authority not only affects one's day-to-day activities and one's income, but also further suggests how one will behave in settings outside of the work place. Although few social scientists have studied the consequences of autonomy as we have defined it, we would expect the amount

of autonomy one has to have wide ranging effects on an individual's life, not only within the work setting (job satisfaction and earnings), but also outside of it.

It seems important to explicitly incorporate those dimensions of power in the work setting into studies of stratification. Two pieces of research suggest that while certain aspects of power in the work setting and occupational status (prestige) are correlated, they clearly refer to different dimensions of jobs. Occupational status (or prestige) measures the "goodness" of the occupation as evaluated by groups of raters (Duncan, 1961; Siegel, 1971; Featherman, Jones and Hauser, 1975). The work of Goldthorpe and Hope (1972) suggests that three criteria are used by the raters in evaluating the goodness of an occupation: income, education and prestige of the job. Aspects of power in the work setting are not explicitly considered when raters evaluate the "goodness" of occupations. Wright and Perrone (1977) show that authority position on the job, which they interpret as class in a Marxist sense, has an effect on income that is independent of the effect of occupational status. These findings suggest that if one wants to consider aspects of power in the work setting as important dimensions differentiating the job hierarchy, one must include them explicitly rather than using a SEI scale as a proxy for them.

One way that aspects of power in the work setting can prove helpful in the study of social stratification is by clarifying sex similarities and differences in location in the hierarchical structure. Research which has relied on occupational status (or prestige) as the

best indicator of position in the work setting has found that the SEI distributions of men and working women have the same mean and very similar standard deviations, and that the processes by which men and women are sorted into these positions are nearly identical (Treiman and Terrell, 1975; McClendon, 1976; Featherman and Hauser, 1976).

Despite sex similarities in the occupational status attainment process, there are numerous theoretical reasons why one would expect women not to be in positions of authority in the work setting. In this society, persistent sex-role socialization has led to a well-defined division of labor within the family. Traditionally, women's obligations centered on marriage and childbearing, and labor market behavior was secondary to these other obligations (Myrdal and Klein, 1956; Parsons, 1942; 1955; Smuts, 1971). This sex-role socialization combined with the division of labor within the family has had implications for the division of labor in the work setting (Boulding, 1976; Bernard, 1976; Hartmann, 1976). It affected what kind of positions employers thought were appropriate for women as well as what kinds of positions women were interested in obtaining. Employers' views on women's adequacy to perform in supervisory positions are shaped by employers' attitudes on what women's roles should be as well as the actual labor force behavior of women. Employers believe women should not be in positions of authority in the firm because of their 1) intermittent employment, 2) lack of sufficient tenure and commitment to the firm, and 3) restrictions on geographic mobility as well as on travel for work (Blau and Jusenius, 1976; Oppenheimer,

1970). Further, employers often feel women are too emotional and therefore are unfit to be in supervisory positions (Kantor, 1977; Bowman et al., 1965). There is also a strong belief among employers and workers that women should not supervise males or mixed work groups (Caplow, 1957; Kantor, 1977; Whyte, 1949; Oppenheimer, 1970; Bowman et al., 1965; National Manpower Council, 1957). Other reasons for not expecting women to occupy positions of authority concern some women's views of their own competence for such positions as well as their lack of desire to be in supervisory roles. Having been socialized into passive roles, some women view themselves less capable of assuming leadership positions. Some women are reluctant to assume positions which require long-term commitment to a particular firm due to anticipated interruptions in employment. Thus, women are less likely to be in supervisory positions because of attitudes and behaviors of employers and workers as well as the preferences and employment experience of some women.

There is some empirical support for our argument that women are less likely to be in supervisory positions. First, women are much less likely to be in the Census major group "managers and administrators except farm" than men. In 1973, 4.9 percent of all women workers and 13.6 percent of all male workers were in this major group (Handbook of Women Workers, 1975: p. 89). Second, according to Grimm and Stern (1974), although women are highly represented in certain semi-professional occupations (nursing, social work, school teaching, librarian), men are over-represented in the higher level positions within these semi-professions. This implies that even in the sectors

of the labor force where women predominate, men tend to be in supervisory roles. In general, women tend to be excluded from occupations which by definition involve supervising others and they tend not to assume supervisory positions in work settings in which they dominate, let alone in mixed work groups. This empirical evidence does not address whether women are less likely to be in supervisory positions net of their occupational status and other characteristics. We hypothesized that net of these other factors, women are less likely to control the work process of others.

The other aspect of power in the work setting is autonomy, control over one's own work process. Research and speculation on the distribution of autonomy by sex as well as its effects on other characteristics has been limited. For this reason, our research on autonomy is exploratory.

There are numerous reasons why women might not have as much autonomy as men. First, we assert that autonomy and authority are two positively correlated dimensions of power in the work setting. This implies that those who assume supervisory roles would be expected to have more autonomy than those who do not assume such positions. Since we hypothesized that women are less likely to have authority in the workplace, it could follow that they would have less autonomy as well. Second, one mechanism by which an individual can obtain control over his/her own work process is to be self-employed. Women might have less autonomy just because they are less likely to be self-employed (U. S. Bureau of Census, 1963).

There are also a number of reasons why women might be more autonomous in the work setting than men. Many of the predominantly female occupations involve the performance of tasks which mirror functions women perform in the household (Oppenheimer, 1970; Bose, 1973; Kantor, 1977). Women's role as a wife/mother involves caring, tending, feeding and giving emotional support. This image carries over into what is viewed as appropriate employment for women. Because of this, women are overrepresented in the service sector in such occupations as nurse, social worker, private household worker, school teachers, and secretaries. The aspects of the wife/mother role that are carried into these occupations are not as easily closely supervised as they require considerable latitude in the performance of tasks in different situations. Thus, the incumbents of these occupations might tend to have more autonomy. Another argument concerns the fact that white collar workers are less likely to be as closely supervised as blue collar workers. Women could be more likely to have autonomy as more of them are white collar workers (60.8 percent of the women vs. 39.8 of the men were white collar in 1970 [U. S. Bureau of Census, 1973]). Given the conflicting theoretical arguments about autonomy, there is no way to predict a priori what the nature or extent of the sex differences in autonomy are.

Despite the fact that men and women have similar levels of occupational status, we have argued that they could have differing amounts of authority and autonomy. Consideration of these other dimensions of jobs in defining positions in the job hierarchy should lead one to a clearer picture of the stratification of the sexes

than would be obtained from looking at status alone. The empirical analysis in this paper will test whether men and women have differing amounts of authority and autonomy holding constant other relevant variables. The variables are included for two reasons. First, occupational status, a dimension of the job hierarchy, is included so that we can control for what students of stratification have called comparable positions in the occupational structure. Second, the other group of variables are included so that we can identify the mechanisms by which men and women get sorted into different positions of authority and autonomy. The two variables are education and self-employment. Education is the major mechanism by which positions in the hierarchy are obtained. Self-employment could imply autonomy and an increased likelihood of supervising others. The analysis will ascertain whether men and women have differing amounts of authority and autonomy and will examine some of the mechanisms by which these positions are obtained.

Data, methods and variables

The data are from the Wisconsin Study of Social and Psychological Factors in Socioeconomic Achievement, which is a longitudinal study of a random sample of 10,317 persons who were seniors in Wisconsin high schools in 1957 (Sewell and Hauser, 1975). A follow-up study of the members of the sample was executed during 1975, obtaining completed interviews of 9,138 respondents (or 88.5 percent of the original sample). The data for these analyses are drawn from the 1975 reinterviews. Using this data set means that there are no individuals will less than 12 years of education included

in the sample. The results cannot be generalized to non-high school graduates.

The sample included 7,563 individuals (4,264 men and 3,299 women) 1) who had a current job or had worked in the last five years, 2) whose current or "last" job was not unpaid work at a family business or farm,[1] and 3) who had data on all relevant variables for the analysis. The largest sample attrition was due to the fact that 1,329 females did not have a current or "last" job. (See Fligstein and Wolf, 1976, for a discussion of some of the potential effects of looking at a censored population -- employed women.) This data set was chosen because it had information for men and women on power in the work setting and a sufficiently large number of cases for complex analyses.

The method used is log-linear analysis with a dependent variable (Bishop, Fienberg, and Holland, 1975; Goodman, 1971; 1972; 1976). The reason for choosing this analytical strategy is that our dependent variables, authority and autonomy, are polychotomous and ordinal scales, and lack qualities of interval measures.

Log-linear models imply a cross-classification of data into a multi-dimensional contingency table where all variables are in categorical form. The variables have been coded in the following way. Education has four categories defined by number of years of completed schooling: (1) 12 years, (2) 13-15 years, (3) 16 years, (4) 17 + years. Occupational status is coded into the following eight categories using Duncan SEI scores (Duncan, 1961; Featherman, Sobel, and Dickens, 1975): (1) 0-19, (2) 20-29, (3) 30-39, (4) 40-49, (5) 50-59,

(6) 60-69, (7) 70-79, (8) 80-96. The first and last two deciles were combined as there were small numbers of individuals at the extremes of the distribution. Class of worker is dichotomized into employed by private business or government and self-employed.

The operationalization of the concept of authority was based on "yes-no" answers to the following questions:

(1) I have authority to hire or fire others.

(2) I can influence or set the rate of pay received by others.

(3) I supervise the work of others. That is, what they produce or how much.

The categories were defined according to the number of "yes" answers to these three questions. The first category (the "highest" amount of authority) included individuals who answered "yes" to all three (1,560 respondents); the second category included those who answered "yes" to any two (1,234 respondents); the third included those who answered "yes" to any one of the questions (1,524 respondents); and the final category included those who answered "no" to all of the questions (3,245 respondents). We argue that this categorization represents a rough ordinal scale of authority on the job. Those in "high" authority positions can hire, fire, set pay, and supervise others. Those in lesser positions will not have these responsibilities.

The concept of autonomy is categorized on the basis of "yes-no" answers to the following questions:

(1) Someone else supervises my work. That is, what I produce or how much.

(2) Someone else decides both what I do and how I do it.

The answers to these questions were scaled into three ordered

categories in the following fashion. The highest amount of autonomy is based on a "no" answer to the first question; those who answered the question "no" (2,245 respondents in our sample) were not asked question two. The "middle category" of autonomy were those who responded "yes" to the first question and "no" to the second. These individuals (2,960 respondents) have limited autonomy. Those who answered "yes" to both questions (2,358 respondents) have the lowest amount of autonomy.

Although we have asserted that authority and autonomy are two positively correlated dimensions of power in the work setting, we have not demonstrated this empirically. After recoding the five source questions so that positive responses indicated greater amounts of power, we executed a factor analysis with an oblique rotation. Two factors emerged with the three authority questions loading high on the first factor and the two autonomy questions loading high on the second factor. The two factors were correlated .44. Our conceptualization of authority and autonomy as two distinct, but positively correlated dimensions of power in the work setting has been confirmed.

Clearly, both of these constructs are measured by subjective responses to a series of questions. Therefore, there is an element of perceived authority and autonomy in these measures. As such, the measures are not objective measures of position in a job hierarchy. However, we have more confidence in the objectivity of the authority measure than in the autonomy measure. Our concern is generated by the fact that the questions which comprise the autonomy scale are

very general and, therefore, more vulnerable to subjective biases. This is in contrast to the authority scale which is constructed from questions that ask specifically about one's control over certain processes in the work setting (i.e., hire, fire, pay and promotion). Despite this caveat, this data set is the only one, to our knowledge, which includes questions that can be used to measure authority and autonomy for both sexes.

Analyses

Several specific hypotheses concerning sex differences in the positions in the job hierarchy can be derived from the previous discussion. The hypotheses and their empirical tests follow.

H1: (A) An individual's sex does not have a main effect on his/her occupational status level, when controlling for the main effect of education. (B) The effect of education on occupational status level does not differ for each sex.

Although these hypotheses seem counterintuitive, status attainment research using regression analysis has indicated that there are similarities in the process of status attainment (as well as similarities in the means and standard deviations of SEI scores) by sex. The central argument of this paper is that although there are sex similarities in the status attainment process, consideration of other dimensions of jobs will clarify sex differences in position in the job hierarchy. As a first step, we try to confirm the result of sex similarities in occupational status attainment using log-linear models.

Line 5 of Table 1 is a test of hypothesis 1A. Our log-linear

Table 1--A log linear analysis of the effects of sex (1) and education (3) on occupational status (2), N = 7,563

Model	χ^2_{LR}	df	p	Δ	χ^2/df
1. (13)(2)	3403.95	49	.000	24.82	--
2. (13)(12)	3036.71	42	.000	22.86	--
3. (13)(23)	444.95	28	.000	8.63	--
4. (13)(23)(12)	154.73	21	.000	4.02	--
5. line 3 vs 4 (test for effect of (12))	290.22	7	<.001	--	41.46
6. line 2 vs 4 (test for effect of (23))	2881.98	21	<.001	--	137.24
7. line 4 vs saturated (test for effect of (123))	154.73	21	.007	--	7.37

analysis indicates that sex has a main effect on the level of occupational status, holding constant sex's effect through education and education's effect on occupational status. This test is analogous to including a dummy variable for sex in a regression of status on education. Previous regression analyses have not revealed differences in the status attainment process of men and women (Treiman and Terrell, 1975; Featherman and Hauser, 1976; McClendon, 1976). We posit that the difference between the results of these two techniques is due to the fact that log-linear analysis is sensitive to the shape of the entire distribution, while regression statistics are based on the first and second moments (means and variances).[2] The sex main effect, while smaller than the effect of education on occupational status level, is not trivial. The net effect of education reduces χ^2 on the average 137.23 for each degree of freedom, whereas the net effect of sex reduces χ^2 on the average 41.46 for each degree of freedom (see lines 5 and 6). We present the parameters describing the main effect of sex on occupational status level for heuristic purposes found in Table 2, despite a significant interaction (123). We do this to indicate the differences in the occupational status distribution of men and women net of the main effect of education. The tau parameters indicate that net of education, men are more likely than women to be concentrated at the extremes of the distribution.

Hypothesis 1B tests whether the effect of education on occupational status level differs for men and women. Regression analyses of these

Table 2--Parameters describing the effect of sex on occupational status level (12) under the saturated model (123), where 1 is sex, 2 is occupational status level and 3 is education.

	Occupational Status Level							
Sex	0-19	20-29	30-39	40-49	50-59	60-69	70-79	80-96
Male	1.279	.666	.993	.800	.691	1.204	1.023	1.739
Female	.782	1.502	1.001	1.250	1.447	.831	.978	.575

data indicate that the total effect of education on SEI of current or "last" job is similar for both sexes (Sewell, Hauser and Wolf, 1977); these results are consistent with past research on sex differences in occupational attainment. Line 7 of Table 1 (the test of hypothesis 1B) suggests that the effect of education on occupational status differs for each sex providing results which conflict with the conclusions of the regression analysis. While the (123) effect is small, it is statistically significant and accounts for 4.5 percent (154.73/3403.95) of the χ^2 in the table. However, an inspection of the parameters for the (123) effect does not suggest that there are large differences in the effect of education on occupational status level for the sexes. Still, sex has a substantial main effect on occupational status level holding constant sex's effect on education and education's effect on occupational status level.

While we have found sex differences in the attainment of occupational status level, our major concern is to ascertain whether there are sex differences in other dimensions of jobs that are important in terms of one's position in the job hierarchy, controlling for the effects of status and other variables.

H2: An individual's sex has an effect on his/her amount of authority in the work place, when the effects of education and status level of job held are held constant.

Hypothesis 2 follows directly from the discussion in the theoretical section and requires no further elaboration here. Table 3 presents the results of a log-linear analysis of the determinants of authority in the work setting. The test of Hypothesis 2 can be found in Part A.

Table 3--A log-linear analysis of the determinants of authority in the work setting

PART A: A log-linear analysis of the effects of sex (1), occupational status level (2), and education (3) on authority in the work setting (4).

		χ^2_{LR}	df	p	Δ	χ^2/df
1.	(123)(4)	2185.34	189	.000	21.27	--
2.	(123)(24)(34)	1036.93	159	.000	14.17	--
3.	(123)(14)(34)	950.18	177	.000	13.36	--
4.	(123)(14)(24)	326.69	165	.000	6.43	--
5.	(123)(14)(24)(34)	280.92	156	.000	5.71	--
6.	(123)(124)(34)	241.00	135	.000	4.61	--
7.	(123)(134)(24)	260.26	147	.000	5.41	--
8.	line 2 vs 5 (test for effect of (14))	756.01	3	<.001	--	278.00
9.	line 3 vs 5 (test for effect of (24))	669.26	21	<.001	--	31.87
10.	line 4 vs 5 (test for effect of (34))	45.77	9	.025	--	5.09
11.	line 5 vs 6 (test for effect of (124))	39.92	21	.168	--	1.90
12.	line 5 vs 7 (test for effect of (134))	20.66	9	.089	--	2.30

PART B: A log-linear analysis of the effects of sex (1), occupational status (2), education (3) and class of worker (5) on authority in the work setting (4).

		χ^2_{LR}	df	p	Δ	χ^2/df
1.	(1235)(4)	3784.91	381	.000	27.31	--
2.	(1235)(24)(34)(45)	1277.58	348	.000	14.73	--
3.	(1235)(14)(34)(45)	1273.56	366	.000	14.21	--
4.	(1235)(14)(24)(45)	580.42	354	.000	7.95	--
5.	(1235)(14)(24)(34)	1880.57	348	.000	15.02	--
6.	(1235)(14)(24)(34)(45)	532.70	345	.000	7.23	--
7.	line 2 vs 6 (test for effect of (14))	744.88	3	<.001	--	248.29
8.	line 3 vs 6 (test for effect of (24))	740.86	21	<.001	--	35.28
9.	line 4 vs 6 (test for effect of (34))	47.72	9	.021	--	5.30
10.	line 5 vs 6 (test for effect of (45))	1347.87	3	<.001	--	449.29

From line A8, we see that sex has a main effect on authority net of status level and education, thus confirming Hypothesis 2. In fact, the effect of sex is the largest net effect on authority in the table analyzed in Part A (see lines A8 through A10). The tau parameters for the main effect of sex on authority in Part A of Table 4 indicate that, holding constant education and status level, women are in jobs which have much less authority than men. In other words, women who have a given level of education and status will be in positions which allow them less control over the work of others than men with similar levels of education and status.

> H3: (A) The effect of sex on one's authority in the work place differs at different levels of status of job held. (B) The effect of sex on one's authority differs at different levels of education.

Hypothesis 3 differs from Hypothesis 2 in that not only do we expect sex to affect authority, but we expect this effect to vary at different levels of status of job held and education. In particular, we expect sexual inequality in authority to be most pronounced at higher levels of status and education. At lower levels of status and/or education, it is possible that neither men nor women have much authority over the work process of others. At upper levels of education and occupational status, men would be more likely to be in supervisory positions because women tend to be concentrated in the semi-professions where they have little authority.

Table 4--Tau parameters describing the main effects of sex on authority under different models

PART A: Tau parameters describing the main effect of sex on authority under the saturated model (1234) where 1 is sex, 2 is occupational status level, 3 is education, and 4 is authority.

	Authority (1 is highest, 4 is lowest)			
Sex	1	2	3	4
Male	1.603	1.130	.947	.583
Female	.624	.885	1.056	1.715

PART B: Tau parameters describing the main effect of sex on authority (14) under the saturated model (12345) where 1 is sex, 2 is occupational status level, 3 is education, 4 is authority, and 5 is class of worker.

	Authority (1 is highest, 4 is lowest)			
	1	2	3	4
Male	2.238	1.098	1.023	.398
Female	.447	.911	.977	2.513

Lines 11 and 12 of Part A of Table 3 indicate that the effect of sex on authority does not differ at different levels of status or education. Hypotheses 3A and 3B are not confirmed. Although we had argued that sexual inequality in authority would be more pronounced at higher levels of education and status, this is not the case. The exclusion of women from supervisory positions is pervasive, regardless of their education or status level.

H4: Even when controlling for the effect of class of worker on authority, men have more authority than women, holding constant the effects of other variables.

Hypothesis 4 is an attempt to further clarify the mechanism by which women obtain less authority. The main effect of sex on authority could merely be due to the fact that men are more likely to be self-employed and those who are self-employed are more likely to have control over the work of others.

The bottom half of Table 3 presents a log-linear analysis of the determinants of authority where the independent variables are sex, education, occupational status level, and class of worker. We are, thus, able to empirically test Hypothesis 4.[3] The sex effect is still very large (line B7) although the class of worker effect is larger (line B10). Inspection of the parameters (in Part B of Table 4) for the main effect of sex on authority indicates this effect is slightly more pronounced when controlling for the effect of class of worker on authority. The results showing women are excluded from supervisory positions cannot be explained by the fact that women are less likely to be self-employed and those who are

self-employed are more likely to be in positions of authority. In fact, net of the effect of class of worker, women are even less likely to be in supervisory positions than men (as indicated by the parameters).

Autonomy, control over one's own work process, is another important, but less studied, dimension of jobs that helps identify one's position in the job hierarchy.

H5: An individual's sex has an effect on autonomy net of the effects of education and status level.

As suggested in our theoretical section, the analysis concerning the sex differences in autonomy is exploratory. We make no specific hypothesis about the direction nor extent of the sex differences in autonomy.

Table 5 presents the results of a log-linear analysis of the determinants of autonomy. An individual's sex has an effect on his/her amount of autonomy, holding constant the main effects of education and status level. Despite the fact that the omission of the main effect of sex increases the χ^2 the most per degree of freedom (lines A8 through A10), inspection of the main effect parameters in Part A of Table 6 suggests that the effect of sex on autonomy is small. The parameters are all quite close to one, but suggest that women tend to have highest and lowest amounts of autonomy, whereas men tend to have medium amounts.

Table 5--A log-linear analysis of the determinants of autonomy in the work setting

PART A: A log-linear analysis of the effects of sex (1), occupational status level (2), and education (3) on autonomy (4).

		χ^2_{LR}	df	p	Δ	χ^2/df
1.	(123)(4)	1029.97	126	.000	14.95	--
2.	(123)(24)(34)	363.98	106	.000	8.89	--
3.	(123)(14)(34)	565.06	118	.000	10.76	--
4.	(123)(14)(24)	307.79	110	.000	6.95	--
5.	(123)(14)(24)(34)	243.00	104	.000	5.95	--
6.	(123)(124)(34)	142.93	90	.001	3.76	--
7.	(123)(134)(24)	225.09	98	.000	5.51	--
8.	line 2 vs 5 (test for effect of (14))	120.98	2	<.001	--	60.49
9.	line 3 vs 5 (test for effect of (24))	322.06	14	<.001	--	23.00
10.	line 4 vs 5 (test for effect of (34))	64.79	6	<.001	--	10.80
11.	line 5 vs 6 (test for effect of (124))	100.07	14	.008	--	7.15
12.	line 5 vs 7 (test for effect of (134))	17.91	6	.083	--	2.99

PART B: A log-linear analysis of the effects of sex (1), occupational status level (2), education (3), and class of worker (5) on autoromy (4).

		χ^2_{LR}	df	p	Δ	χ^2/df
1.	(1235)(4)	2505.69	254	.000	21.97	--
2.	(1235)(24)(34)(45)	424.52	232	.000	8.09	--
3.	(1235)(14)(34)(45)	542.76	244	.000	9.07	--
4.	(1235)(14)(24)(45)	366.31	236	.000	6.12	--
5.	(1235)(14)(24)(34)	1718.75	232	.000	14.90	--
6.	(1235)(14)(24)(34)(45)	306.54	230	.001	5.19	--
7.	(1235)(124)(34)(45)	265.55	216	.012	4.12	--
8.	line 2 vs 6 (test for effect of (14))	117.98	2	<.001	--	58.99
9.	line 3 vs 6 (test for effect of (24))	236.22	12	<.001	--	19.69
10.	line 4 vs 6 (test for effect of (34))	59.77	6	.002	--	9.96
11.	line 5 vs 6 (test for effect of (45))	1412.21	2	<.001	--	706.11
12.	line 6 vs 7 (test for effect of (124))	40.99	14	.008	--	2.93

Table 6--Tau parameters describing the effects of sex on autonomy under different models

PART A: Tau parameters describing the effect of sex on autonomy (14) under the saturated model (1234) where 1 is sex, 2 is occupational status level, 3 is education and 4 is autonomy.

Sex	Hi	Med	Lo
Male	.930	1.138	.944
Female	1.075	.879	1.059

PART B: Tau parameters describing the effect of sex on autonomy (14) under the saturated model (12345) where 1 is sex, 2 is occupational status level, 3 is education, 4 is autonomy, and 5 is class of worker.

Sex	Hi	Med	Lo
Male	.790	1.126	1.124
Female	1.266	.888	.890

H6: (A) The effect of sex on autonomy differs at different levels of occupational status.
(B) The effect of sex on autonomy differs at different levels of education.

We posit these interactions as we expect the differences in autonomy between the sexes to be most pronounced at higher levels of status and education. At lower levels of education and/or status, workers have limited control over their own work regardless of their sex. If there are any sex differences in autonomy we expect them to be manifested in the upper ends of the status and education distributions.

Hypotheses 6A and 6B are tested in lines 11 and 12 of Part A of Table 5. These tests indicate that the effects of sex on autonomy vary at different levels of occupational status but do not vary at different levels of education. This interaction effect (124), while statistically significant, reduces the χ^2 (per degree of freedom) the least of any significant effect in the model. An inspection of the (124) parameters describing this interaction showed little variation from the pattern suggested in the main effect; therefore, we do not present them.

Thus far, we have not been able to demonstrate marked sex differences in autonomy. Despite finding a statistically significant effect of sex on autonomy, the parameters were not very large. As a further attempt to explore the relationship between sex and autonomy, we offer the following hypothesis.

H7: Men and women have different amounts of autonomy, when controlling the effects of class of worker as well as other relevant variables.

It is possible that sex differences in autonomy may be more pronounced with the inclusion of class of worker as a variable. This is because men are more likely to be self-employed and those who are self-employed are more likely to have control over their own work process.

Part B of Table 5 tests whether the effect of sex persists or becomes more pronounced when class of worker is controlled. Line B8 confirms Hypothesis 7. Although the effect of class of worker has the largest effect in the model (line B11), sex still has a substantial main effect. The parameters in Part B of Table 6 suggest women are more likely to be in positions of high autonomy than men and men are more likely to be in middle and low positions of autonomy, when controlling for the effects of class of worker as well as education and status level. This confirms our suggestion that sex differences in autonomy were obscured by the fact that men are more likely to be self-employed. We believe that the autonomy effect is consistent with, but does not confirm, our arguments as to why women would have more autonomy than men.

Our analyses have shown that men and women assume different positions in the job hierarchy.

Conclusions

This paper has explored the utility of considering other dimensions of jobs besides occupational status in the study of stratification. Otis Dudley Duncan, the originator of the SEI scale, said:

> There can be no such thing as a single index of socioeconomic status suitable for all purposes of social research in a modern, complex society. Even in small and static communities of the United States, it is a patent oversimplification of the facts to suppose that the whole population may be placed

> unambiguously in intervals of a single scale of 'class' or 'status'. Given the actual complexity and multi-dimensionality of the stratification structure, any particular variable or index can at best reflect a selected aspect of the structure that may be strategic from a certain point of view. (Duncan, 1961: 139)

We argue that dimensions of jobs relating to power in the work setting, authority and autonomy, are necessary for identifying one's position in the stratification system. Indeed, authority and autonomy are indicators not only of power in the work setting, but also of one's social standing and power in the community at large.

We have illustrated the usefulness of these concepts by showing how they help clarify past research on stratification of the sexes. Despite the common sense notion that women are discriminated against both in terms of the types of jobs they hold and the wages they receive for their work, past research has revealed that men and (working) women have similar mean levels of occupational status and achieve these statuses through similar processes (Featherman and Hauser, 1976; Treiman and Terrell, 1975; McClendon, 1976). By considering authority and autonomy as other dimensions of jobs, we help reconcile what is known about women's jobs with the results from studies of stratification of the sexes that use SEI (or prestige) scores as the sole indicator of one's social position.

What do these analyses tell us about the differential positions of men and women in the job hierarchy that is not known from past research on sex differences in occupational status attainments? Contrary to previous research, our analysis has found sex has a

main effect on occupational status level, holding constant the main effects of other variables. Men are more likely to be concentrated at the extremes of the status distribution than are women. In terms of power in the work setting, women have considerably less control over the work of others, while exhibiting slightly more control over their own work than men for a given level of education and occupational status. We find that these differences are not due to the fact that women are less likely to be self-employed, but that the effects of sex on authority and autonomy are more pronounced when controlling for class of worker. For any given level of status and education, there is sexual inequality in power in the work setting.

We have demonstrated empirically that women are less likely to be in supervisory positions than men. Future research should explore the mechanisms by which women are restricted from positions of authority, that is, the relative contributions of employers' behaviors and attitudes, other workers' attitudes, women's employment histories, and women's aspirations to the restriction of females from supervisory positions. Another line of research could attempt to examine whether women have less authority than men because of their concentration in female occupations, which could have little authority. These suggestions could also apply to the study of autonomy. Our research points to the necessity of including other dimensions of jobs into studies of social stratification so that we can better understand the differences in the positions men and women hold in the job hierarchy.

Footnotes

[1]Those who worked without pay were excluded as it was not possible to ascertain whether or not they should be considered self-employed. There were 165 respondents excluded for this reason.

[2]Although in the three published works on sex differences in occupational attainment, the first and second moments are essentially identical by sex, the distributions of SEI in deciles by sex are, in fact, different. We reconstructed distributions of SEI in deciles by sex from each of the samples used by Treiman and Terrell (1975), Featherman and Hauser (1976), and McClendon (1976). In each case, we were forced to reject the null hypothesis that the distributions were the same by sex. The χ^2 value for McClendon's data is 77.03 with nine degrees of freedom, which has a p value of .003; the χ^2 value for Treiman and Terrell's data is 338.68 with nine degrees of freedom, which has a p value less than .00001; the χ^2 value for Featherman and Hauser's data from OCG-I was 709.70 with eight degrees of freedom, which has a p value less than .00001, while the χ^2 for OCG-II data was 1986.94 with eight degrees of freedom, which has a p value of less than .00001.

[3]In a log-linear analysis of the determinants of class of worker (whether an individual is self-employed or not) sex has a statistically significant (χ^2 = 31.7 with 1 degree of freedom) main effect on class of worker, holding constant education and status level. The parameters indicate that men are more likely to be self-employed than women.

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